

**Notice of Allowability**

Application No.

09/950,023

Examiner

Dung X. Nguyen

Applicant(s)

JANSEN ET AL.

Art Unit

2638

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12 September 2005.
2. ☒ The allowed claim(s) is/are 1 - 57.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
KENNETH VANDERPUYE  
SUPERVISORY PATENT EXAMINER

DXN  
10/12/2005

*Allowable Subject Matter*

1. **Claims 1 – 57 are allowed.** The following is an examiner's statement of reasons for allowance:

**Regarding to claim 1**, the prior art of record fails to show or render obvious of in a system, including a plurality of transmitters which transmit from at least one of the transmitters first and second complex sequences respectively from two spatially diverse antennas of the at least one transmitter to a mobile device, the method at the mobile device, comprising:

Demodulating the first and second complex sequences to produce demodulated of complex first and second sequences;

Detecting the demodulated first and second complex sequences to produce detected complex first and second sequences by multiplying respectively the demodulated first and second complex sequences with complex conjugates thereof;

Averaging a function of the complex detected first and second sequences to produce an average function; and

Processing the averaged function to detect a time, relative to a system time reference, of at least one peak therein resultant from the transmission of the first and second complex sequences.

**Regarding to claim 34**, the prior art of record fails to show or render obvious of in a system, including a plurality of transmitters which transmit from at least one of the transmitters first and second complex sequences respectively from two spatially diverse antennas of the at least one transmitter, a mobile device comprising:

A demodulator which demodulates the first and second complex sequences to produce demodulated first and second complex sequences;

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A detector which detects the demodulated first and second complex sequences by multiplying respectively the demodulated first and second complex sequences with complex conjugates thereof to produce detected first and second complex sequences;

At least one averaging unit, responsive to the detected first and second sequences, which produces an average function of the detected first and second complex sequences; and

A processor, responsive to the averaged function, which detects a time, relative to a system time reference, of at least one peak therein resultant from the transmission of the first and second complex sequences.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Brandao et al. (US patent 5,563,604) lacks of the step of processing the averaged function to detect a time, relative to a system reference, of at least one peak therein resultant from the transmission of the first and second complex sequences.

### ***Conclusion***

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Brandao et al. (US patent 5,563,604) discloses a weather radar using spectral Gaussian envelope discrimination for clutter rejection.

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***Contact Information***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung X. Nguyen whose telephone number is (571) 272-3010. The examiner can normally be reached on Monday through Friday from 8:00 AM to 17:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Vanderpuye, Kenneth N. can be reached on (571) 272-3078. The fax phone numbers for this group is (571) 273-3021.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

DXN

October 12, 2005

  
KENNETH VANDERPUYE  
SUPERVISORY PATENT EXAMINER